OCT 1003

2

of

FORM PTO-1449/A and B (Modified)

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

APPLICATION NO.: 09/909,420

ATTY. DOCKET NO.: H0498.70151US00

FILING DATE:

July 19, 2001

CONFIRMATION NO.: 7277

APPLICANT:

David H. Gracias, et al.

GROUP ART UNIT: 3729

EXAMINER: Kim, Paul D.

U.S. PATENT DOCUMENTS

Examiner's	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication or of issue	
Initials		Number	Kind Code	Document	of Cited Document MM-DD-YYYY	
5,355,577			Cohn	10-18-1994		
		5,512,131		Kumar et al.	04-30-1996	
		5,545,291		Smith et al.	08-13-1996	
		5,776,748		Singhvi et al.	07-07-1998	
		5,900,160		Whitesides et al.	05-04-1999	
		5,925,259		Biebuyck et al.	07-20-1999	
		5,976,953		Zavracky et al.	11-02-1999	
		6,001,232		Chu et al.	12-14-1999	
		6,180,239	B1	Whitesides et al.	01-30-2001	
V		6,355,198	B1	Kim et al.	03-12-2002	

FOREIGN PATENT DOCUMENTS

Examiner's	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation
Initials		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YYYY	(Y/N)
pic		EP	0 481 362	A2 <	Yeda Research and Development Co. Ltd.	04-22-1992	
		EP	0 491 059	A 1	Hollenberg, Cornelis P., et al.	06-24-1992	
		WO	96/29629	A2	President and Fellows of Harvard College	09-26-1996	
					Technicon Research and Development		
		WO	99/04440	A1	Foundation Ltd.	01-28-1999	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	
PIC	/	ALIVISATOS, A.P. et al.,"Organization of 'nanocrystal molecules' using DNA", <i>Nature</i> , vol. 382, 1996, pp. 609-611	
1		ALIVISATOS, A.P., "Semiconductor Clusters, Nanocrystals, and Quantum Dots," <i>Science</i> , Vol. 272. 16 February 1996, pp. 933-937	
	/	BONCHEVA, et al. "Biomimetic self-assembly of a functional asymmetrical electronic device," <i>Proc. Natl. Acad. Sci. USA</i> , vol. 99, no. 8, 2002, pp. 4937-4940	
	,	BOWDEN et al., "Mesoscale self-assembly: capillary bonds and negative menisci". J. Phys. Chem B. 2000, vol. 104, no. 12, pp. 2714-2724	
	/	BOWDEN et al., "Molecule-mimetic chemistry and mesoscale self-assembly", Acc. Chem. Res. 2001, vol. 34, no. 3, pp. 231-38	
	1	BOWDEN et al., "Self-assembly of mesoscale objects into ordered two-dimensional arrays", Science, 1997, vol. 276, no. 5310, pp. 233-35	
	/	BOWDEN et al., "Self-assembly of microscale objects at a liquid/liquid interface through lateral capillary forces", Langmuir, vol. 17, no. 5, 2001, pp. 1757-65	
V	/	BREEN et al, "Design and Self-Assembly of Open, Regular, 3D Mesostructures", Science, 1999, vol. 284, pp. 948-951	

Serial No.: 09/909,420 Art Unit: 3729

Conf. No.: 7277

		<u></u>	CHOL at al "Management Higgsphies! Two Dimensional Salf Assembly" Array Chan Let Ed Engl	
1/1	1011	P	CHOI et al, "Macroscopic, Hierarchical, Two-Dimensional Self-Assembly", Angew. Chem. Int. Ed. Engl., 1999, vol. 38, no. 20, pp. 3078-3081	
17		- 0		 -
1 <i>I</i>	•		GRACIAS et al., "Forming electrical networks in three dimensions by self-assembly", Science, vol. 289,	
	Iner		L August 18, 2000, pp. 1170-1172	
10	Joet 3	2003	HARSH et al., "Solder self-assembly for three-dimensional microelectromechanical systems", Sensors and] [
PH	<u></u>		Actuators, 77, 1999, p. 237-244	
1	5	16	HEATH et al., "A Defect-Tolerant Computer Architecture: Opportunities for Nanotechnology", Science,	
`	TRADI	1628	vol. 280, 1998, pp. 1716-1721	
			KRALCHEVSKY et al., "Capillary forces between colloidal particles", Langmuir, 1994, vol. 10, no. 1,	
ŀ		•	pp. 23-36	
			MILLER, L.P./IBM, "Controlled Collapse Reflow Chip Joining", J. Res. Develop., May 1969, pp. 239-250	
			MIRKIN et al., "A DNA-based method for rationally assembling nanoparticles into macroscopic materials",	
			Nature, vol. 382, August 15, 1996, pp. 607-9	1
	†		ROTHEMUND, P.W., "Using lateral capillary forces to compute by self-assembly", Proc. Natl. Acad. Sci. USA,	
	ł	1	vol. 97, no. 3, 2000, p. 984-989	
			SYMS et al., "Self-Assembly of Three-Dimensional Microstructures Using Rotation by Surface Tension	
	1	/	Forces", Electronic Letters, 1993, vol. 29, no. 8, pp. 662-664	
			TERFORT et al., "Three-dimensional self-assembly of millimetre-scale components", Nature, vol. 386,	
	ł		March 13, 1997, pp. 162-64	
· · · · · · · · · · · · · · · · · · ·			VISSCHER, P.B. et al., "Self-Assembly in Model Magnetic Inks", IEEE Transactions on Magnetics, vol. 34,	
1			no. 4, 1998, pp. 1687-1689	
	1		WHITESIDES et al., "Noncovalent synthesis: using physical-organic chemistry to make aggregates", Acc.	
	1		Chem. Res., 1995, vol. 28, pp. 37-44	
		<u> </u>	YAMAKI et al., "Size-dependent separation of colloidal particles in two-dimensional convective self-assembly:,	1
			Langmuir, 1995, vol. 11, no. 8, pp. 2975-78	
		<u> </u>	YEH, His-Jen J. et al., "Fluidic Self-Assembly of Microstructures and its Application to the Integration of GaAs	
l t	y	•	on Si", IEEE, 1994, pp. 279-284	j
	-		1 o. o. j j j.	

EXAMINER DATE CONSIDERED 13/3/04		/	
	1. Januar		8/3/04

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.